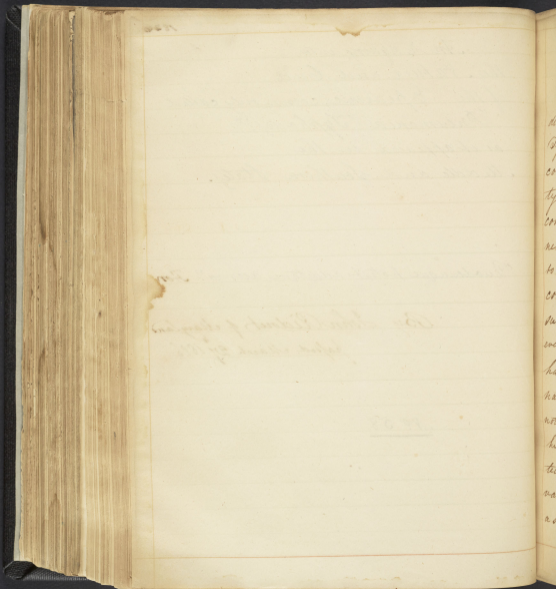


An Enquiry into
the Nature and Cure
of the Epidemic, commonly called
"Pneumonia Typhodes;"
as it appeared in the
Middle and Southern States.

"Quodcumque potest, additum accersit." For

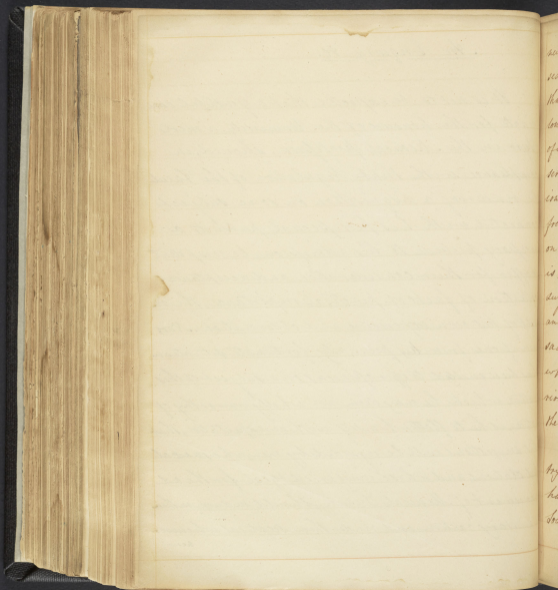
By John Ridout of Maryland
passed March 27th 1816

No 58.



An Enquiry, &c.

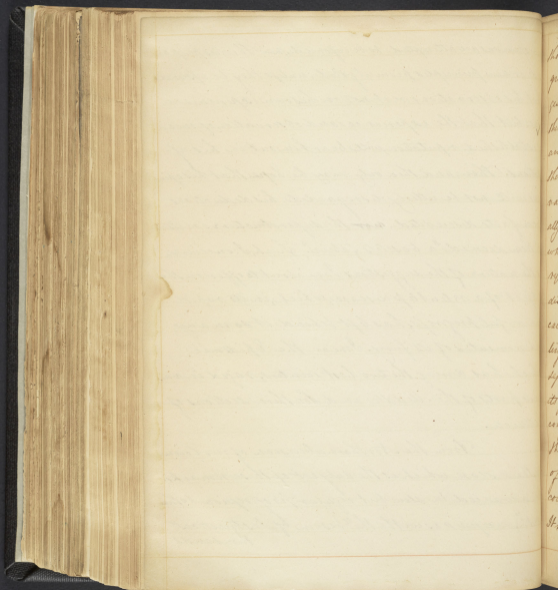
It is not to be expected that a youthful candidate for the honour of the University, a mere Tyro in the Medical profession, should, in compliance with that Regulation of the Faculty rendering a disquisition on some subject connected with his professional pursuits a necessary prelude to his admission, be competent to offer for their consideration and acceptance a collection of facts of practical importance, the result of his own experience and observation. Nor, even if one from his peculiarly fortunate situation has been enabled to offer opinions on a subject of this nature which he may deem not wholly unworthy of notice, is he to flatter himself with an expectation, that his suggestions will be regarded by men, whose exalted stations, and whose unvaried zeal for the advancement of Medical Science, should induce in them a salutary caution, and render them sceptical whenever
new



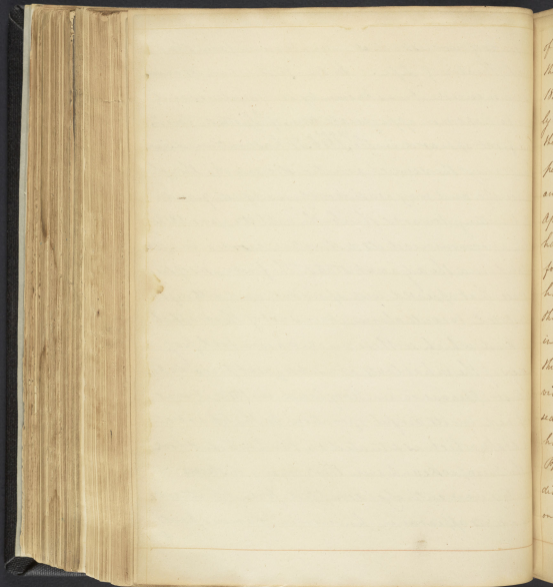
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new opinions are attempted to be enforced, new Theories proposed, or new principles promulgated; unless they be opposed that his observations rest not on his own experiences alone, but that the experience and observations of men of established reputation, will bear him out in his assertions. Then, and then only may he hope, that his opinions will not be utterly disregarded, his deductions from facts discredited, ~~nor~~ the superstructure erected on them deemed "a baseless fabric". Such, I conceive, is the nature of the suggestions I am about to offer on the subject of a relentless disease, which, in its rapid and awful progress, has left behind it so many sad mementos of its fury. I mean the Epidemic which has during the two last winters, raged in various parts of the Middle and Southern sections of the Union.

From the Northern Division of our Country, the disease which is the subject of these remarks, has advanced in slow but regular proportion to the South, sweeping as with the "besom of destruction" thousands



Thousands of our most valued countrymen from the
great Theater of Life. In the North where its ravages
first commenced, it was known by the familiar, and
there perhaps more appropriate term, of "Spotted Fever",
and first appeared in the ^{year} 1816. It has continued since
then, bearing the same characteristic marks, though
variously, and very considerably modified, gradually
travelling towards the South, until the year 1812,
when it commenced its destructive career in Ma-
ryland and the adjacent states. The first cases of the
disease that appeared were sporadic, and although
calculated to excite alarm, it was not of that appal-
ling kind which with so much reason took pos-
session of the inhabitants at a subsequent period. In
its first appearance in Maryland in 1812, it was
confined in its direful operation, to that part of
the state, which is situated on the Eastern shore
of the Chesapeake and even there many districts of
country were entirely exempted from its attacks.
It made its appearance however in various parts
of



of the Western shore of Maryland, and in Virginia
the next year; but it was not until the winter of
1814-15 that its deadly influence became so wide-
ly extended. In each of the above mentioned years
the first cases of the disease appeared at a late
period of November or early in December,
and continued with unabated violence until
April: many cases also occurred after the Spring
had considerably advanced, and some were
found as late as May or even when Summer
had commenced. It is worthy of remark however,
that the disease became much more moderate
in its attacks at these latter periods; and indeed
throughout its whole course the number of its
victims was greatly augmented with the increa-
sed inclemency of the season. This circumstance
has been likewise remarked by many of those
Physicians who practice most extensively in the
disease; and a Gentleman who has written much
on the subject, with great truth observes, that the
disease

* The cold of the last winter was more intense in degree than had been experienced within the memory of our oldest inhabitants. The alternations of heat and cold, during the months of April and May were likewise very remarkable.

disease became more violent, and many persons were attacked immediately on a sudden change of weather from a moderate temperature to cold. Yet notwithstanding it prevailed more extensively in cold, wet, or damp weather and its attacks were more violent, a series of mild or even warm weather afforded no security against it.*

A prejudice very generally obtained in Maryland, that the disease originated with the United States Troops stationed in various parts of the Country. But this opinion was certainly unfounded, for although in many places it first appeared amongst them, they being more exposed to the two chief exciting causes viz. cold, and fatigue, yet it at the same time frequently made its appearance in many situations very remote from their encampments. Neither did it appear to be contagious, as the fears of the people generally induced them to apprehend. In a great number of instances in which it attacked many members of the same family, the circumstances

* Hence it proved fatal to so great a number of Physicians
and in some parts of the State, to persons employed
in nursing the sick, and others, who had not taken
sufficient precaution to guard themselves against the
ill consequences of fatigue, inclemency of weather.

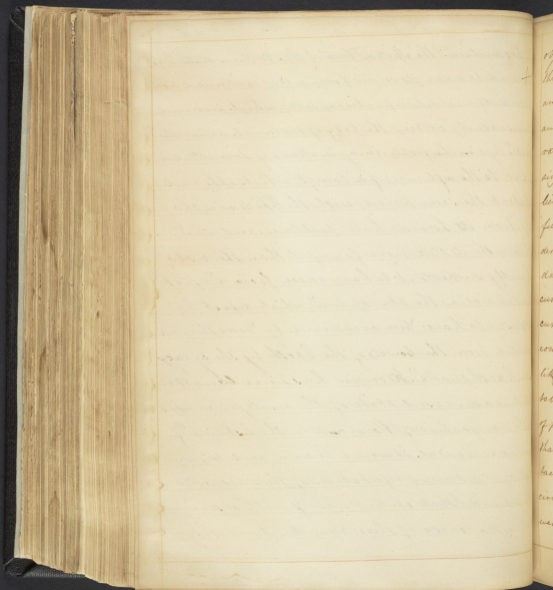
circumstances was readily ~~to be~~ accounted for
either by a similarity in their situations from exposure
to cold, or fatigue, irregularity of diet; or some other
cause which called into action the disease which had
been lurking in the system.*

Different appellations have been given to this disease
in the various parts of the country which have been
exposed to its violence, such as Spotted Fever (*Fe-
bris Maculata*) Typhus Pleurisy (*Pneumonia Ty-
phodes*) Putrid sore throat, Head complaints, &c;
which generally derived their origin from the pre-
valence of some particular violent symptom that
occurred during its course. The name by which
I shall designate it in these observations is that
of Bilious Pleurisy (*Pneumonia Biliosa*): my
reasons for adopting this term will be detailed
hereafter.

Before proceeding more particularly to re-
late the symptoms of the disease, I will say a few words re-
specting the causes which have been assigned for
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its productions. The "Spotted Fever" of the Northern States, was supposed to derive its origin from a long continued prevalence of a cold, damp, atmosphere, which produced the disease by "robbing the body of too much animal heat." Again, the fertile imaginations of some attributed it to the influence of a Comet, which appeared at about the same period with the Epidemic, shaking "from its horrid hair, pestilence and war". While a third still more fanciful than the rest shrewdly suspects it to have arisen from a "defect of vital air in the atmosphere"; which defect he supposed to have been occasioned by "something extricated from the bowels of the Earth by the agency of an Earthquake". Its origin has since been attributed to a diseased state of the small grain used in the manufacture of Flour, and in the distilling of spirituous liquors. It would be vain and trifling to attempt a serious refutation of these absurd conjectures, and I shall content myself with observing that in the course of these remarks, it will be my object



object to endeavour to prove that the disease arises from the accumulation of bilious and acrid matter in the stomach and bowels, and that the affections of the head, chest, and throat, generally observed as occurring either separately or altogether, are merely secondary symptoms arising from the disorder of the Primæ Viæ, and to be relieved by remedies calculated to remove the primary affection. With respect to the causes producing this disorder of the biliary organs, we are, I believe, wholly in the dark, although we may be well informed as to the circumstances that appeared most favourable to the occurrence and extension of the disease, and with the constitutions and habits of the persons in whom it was likely to prove most fatal. It was uniformly observed to become more violent, and to attack a greater number of persons during the prevalence of cold and wet weather than at any other period. Those most liable to its attacks were persons who from ^{the nature of} their occupations or other circumstances were exposed to the inclemency of the weather, fatigue, or other debilitating causes. It proved
most

*. As far as I can learn, from the publications which have appeared, and from other sources, the description of the Epidemic as it appeared in Maryland, will apply equally well to the more Southern states.

most fatal to persons advanced in life, to debilitated and more especially intemperate persons: indeed it was a rare occurrence for one of intemperate habits in the lower walks of life, and who from his situation was subjected to numerous privations, to recover from the disease or its consequences. Children suffered comparatively but little from its attacks.

I will now proceed to relate the symptoms of the disease as it appeared generally in Maryland, and particularly as they occurred in a majority of those cases which came under my own observations, noticing the varieties which often took place as the disease assumed different forms.

Without any premonitory symptoms, the patient was most frequently, suddenly seized with a chill, which differed in duration, ^{and} severity in various cases; this was succeeded by alternate chills and flushings followed by an increased heat of the body, with a greater or less degree of febrile action. The heat of the skin was very rarely so considerable as in ordinary Pyrexia, but the patient com-
plained

*. In one case of this kind the patient was seized with a violent pain at the angle of the jaw, which continued for a short time when the disease assumed its most violent form and the woman died within ten hours from the attack.

† Coma sometimes occurred.

complained much of a sense of great internal heat, and
often, though not always, of much thirst. Sometimes the first
symptom of the disease was a severe pain of very small ex-
tent, in some particular part of the body, which continued
not very long, before the other symptoms of the disease ap-
peared.* The face was flushed, the eyes often inflamed,
and the pain in the head, particularly over the eyes, intense,
and at the commencement, often constituted the most urgent
symptom: sometimes, the pain was increased to delirium,
and was always more severe than in genuine
pneumonic inflammation. Severe pain in the side or some
other part of the Thorax, which was increased during
inspiration and frequently by pressure, and which ten-
ded continually to change its position from one point to
another, or to become more diffused throughout the chest;
with a sense of fulness or tightness, and disordered or anx-
ious respiration interrupted with frequent sighing, attended
in a considerable majority of cases. A sense of weight, pain
and oppression at the stomach, with a loss of appetite, nausea
and generally a vomiting of a fluid usually bilious in its
appearance

*. As the spring advanced these became more frequent

*. This variation in the pulse was also observed by Oglehorn in the Bilious Pleurisy of allinocasts, which I shall here after refer more particularly.

†. When bloody the expectoration differed from that in ordinary cases of Pneumonia in this, that the fluid discharge was frothy and the blood intimately mixed with the fluid

appearance, occurring either during the chill or subsequently, were symptoms commonly observed*. The bowels were usually painful and constipated. The Tongue was loaded with a thick yellowish matten, or smeared with a dark coloured viscid mucus; sometimes however it was moist and natural in its appearance, at others dry and scabrous. The pulse was generally frequent, but not tense, and often not more full than that of a person in health; frequently, however, irregular, being sometimes full and even hard in ^{one} arm, while soft and weak in the other; or it was very frequent, quick, and in many cases intermitting: it varied not only in different persons, but in the same person at different times*. The patient was harassed with a cough, which most frequently did not occur on the first day, sometimes dry, but generally attended with an expectoration of a yellow, tenacious, or dark coloured mucus, frequently mixed with blood. In many cases the expectoration was natural. In a majority of cases, the patient a few hours after the attack complained of hoarseness and uneasiness about the fauces which soon became more

* The commencement of the affection of the throat was
sometimes perceived before the occurrence of the chill.

more or less inflamed, occasioning a great difficulty of
deglutition and respiration, with giddiness, faintness
and disposition to vomit, thus greatly aggravating the
distress of the patient, and in some cases occasioning
death by suffocation in less than 24 or even 12 hours.*
The Tonsils, Uvula, tongue, &c, were sometimes much
inflamed, and in some instances extensively ulcera-
ted, though in general these affections were not suffi-
ciently violent, to account for the symptoms observed
on their occurrence. The prostration of strength even
from the commencement was so remarkable as to con-
stitute one of the distinguishing marks of the disease.
Partial sweats, and coldness of the extremities, parti-
cularly of the feet, were often remarked.

Where the symptoms occurred with an extraordinary
degree of violence, whether the head, thorax, or throat
were the seat of the disorder, the life of the patient
was often terminated within 24 hours from the time
of the attack. If the disease did not prove fatal on
the second or third day, it was frequently protracted
for

* This circumstance has likewise been observed by some of those Physicians who have written on the subject. Dr. Morton of Maryland who practised extensively in the disease observes, that "when external inflammation took place, it was invariably a favourable sign." Rusham and Clyphorn, to whose works I shall hereafter refer, have likewise mentioned the occurrence of Erysipelas as a favourable symptom in the epidemic Pleurisy, which they have described.

several weeks, assuming somewhat of an intermittent form, or terminating in Typhus. After the violence of the disease had subsided, and it had lost its characteristic marks an obstinate Intermittent often succeeded.

A very frequent termination of the disease, was in that of Inflammation of some external part; more frequently by one of the large joints. Whether this inflammation were of a phlegmonous or pyopelatoous kind, the latter of which however most frequently occurred, its appearance almost invariably denoted a favourable termination of the disease. * Large glandular swellings often proceeding to suppuration sometimes occurred about the neck, and other parts. This disposition of the disease to metastasis is one of its most remarkable characteristics. Its sudden translations from the chest to the throat, head when these were not primarily affected, joints, &c were truly astonishing. Amongst many others which might have been mentioned as demonstrative of this fact, the abstract of the cases 401. 2. 3. at the end of this Essay will be sufficient. I have known but one case of the
disease.

*. In the blood which I had an opportunity of examining; this was very rarely observed.

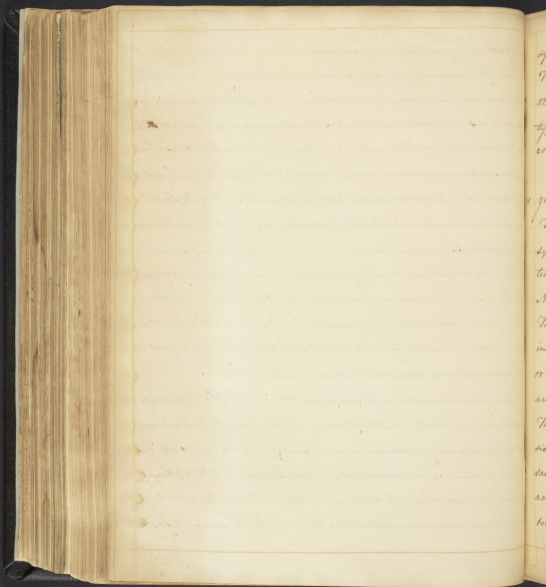
†. Similar appearances of the Blood have been described by Huxham.

disease terminate in Phthisis.

The Blood drawn in this disease when allowed to remain undisturbed assumed various appearances, being sometimes covered with a thick inflammatory crust, at others with a thin pellicle of a somewhat greenish hue: often remaining fluid a considerable length of time, or the proportion of coagulum formed, to that of the serum in which it floated, being very inconsiderable.

The circumstances denoting a favourable termination of the disease, were, a moderate and general dyspnoea, improved respiration and deglutition, a more natural appearance of the eyes and countenance, the appearance of inflammation or tumours on the surface.

The unfavourable symptoms, were torpor of the bowels, difficulty in exciting the action of the stomach, delirium, coma, violence of the anginous affections, great oppression at the chest, sudden and extreme prostration of strength, pericardiac, continued coldness of the extremities, picking at the bed clothes, singultus, &c. The whole or some of these
symptoms



symptoms always preceded the death of the patient. The recovery of the patient was not always immediate nor complete. As was mentioned above a low typhus, or intermittent often succeeded, or the patient continued languid and weak during several weeks.

It has been alledged that this is a disease of the same generic nature with that which prevailed in the North. That it is so, may be readily proved by comparing the symptoms above described with the character of the "Spotted Fever" as given by a number of practitioners in New England, in the collection published by Dr. North. The Pathognomonic signs of the disease as it appeared in that section of the Country, were, Head ache, coma, or delirium, sore throat, a weak irregular pulse, a sudden and great prostration of strength, nausea, vomiting. These symptoms, common to the Epidemic of both divisions of the Country, sufficiently denote them to be the same disease. In some respects however the two diseases are different; the Epidemic of the North presenting symptoms which were rarely to be met with in the South, whilst

*. These denote says the Dr. rather the violence than any particular nature of the disease.

whilst in the latter on the contrary, the disease appeared under circumstances which did not occur in that of the former. In a pamphlet published on this subject by Dr. Wright of Baltimore, the varieties that appeared in the two diseases have been detailed at some length; I shall at present offer a very condensed view of these differences abstracted principally from the work alluded to, assuming the liberty however of making such alterations as my own observation, and the experience of other practitioners will justify.

- 1st The "Spotted Fever" of New England, differed from the Epidemic of Maryland in the presence of maculae and petechial discolorations, particularly with respect to the time of their appearance. They were rarely observed in the latter state, and when they did appear, it was always at a very advanced period of the disease*.
- 2^d As to the frequency of Delirium, Coma, and Mania.
- 3^d In respect to defect of general temperature. We had chill in the former state of the disease, with cold extremities, which generally lasted only a few hours, though occasionally the cold days continued throughout the greater part of the patient's illness.

15th

*. I have seen one case only terminating in hemiplegia.

† This was more particularly the case on the Eastern shore of Maryland and Virginia, where the inhabitants are, during the summer and autumnal months, afflicted with very violent bilious remitting, and Typhus Fevers.

4th In muscular rigidity, tetanic symptoms, paralysis. 5th In the general smallness and frequency of the pulse. It was generally frequent, and most frequently after the chill as full as in health, often more so. 6th In the occasional symptoms of the disease, as Syncope, temporary blindness, strangury, and hæmorrhage. The Southern Epidemic on the contrary exhibits characters not observed in that of the North, viz. a severe pulmonary affection accompanied with pain of the Thorax, cough, increased and often bloody expectoration, flushing of the cheeks, &c. These were the chief marks of difference observed in the two diseases and surely they are insufficient to justify us in designating the Epidemic by different names or to lay down for adoption very opposite modes of treatment. An equal or perhaps even greater variety was observed in the Epidemic of adjacent states or even in different parts of the same State; some of the symptoms that appeared more remarkably in one district of country being frequently absent in another. In certain situations the symptoms of prostration of strength, and inordinate debility appearing almost universally at initiation, while in others the disease as evidently displayed an inflammatory tendency.

*. As in the northwestern part of Maryland, a high mountainous country where diseases of an inflammatory form most commonly prevail.

†. This great variety under which Epidemics often appear has been remarked by many authors, and particularly by Dr. Rush in his account of the Yellow Fever which has frequently prevailed as an Epidemic in various parts of our country.

from its commencement*. Indeed this Protiform nature of the disease constituted one of its most remarkable qualities. In so many various forms did it make its appearance, that at first before physicians ^{had} become sufficiently aware of this peculiarity, the same disease appearing only under different forms received a totally opposite, and of course in many cases an improper mode of treatment. At one time the affection of the head, at another the symptoms of Typhoid, and again the pulmonary disorder each in its turn predominated, and received the treatment adapted to a primary affection of these different organs. The symptoms of prostration that so often prevailed, were likewise attempted to be counteracted by remedies called for in the lowest stages of Typhoid debility. The primary disorder was in short in many cases entirely lost sight of.

The Bilious Plurisy as it has lately appeared amongst us is by no means to be considered as a new disease. Epidemics whose characteristic features so closely resembled those of the disease now under consideration that they may

* Wilson observes that "the *Pneumonia typhodes*" whether idiopathic or symptomatic is often accompanied with the symptoms peculiar to *Bilious Pleurisy*."

may with propriety be considered as the same, varying
only from some peculiar circumstances of climate, consti-
tution, &c, have been described by ~~different~~ authors as
occurring at various periods in different parts of Eu-
rope. In our own country likewise, Epidemics bearing a
very close analogy to the one in question, have at for-
mer periods, prevailed in a greater or less degree. To these
Dr. Rush has alluded in many parts of his writings, and
the Professor of Materia Medica in his Lecture on this sub-
ject speaks of their strong resemblance to the present
Epidemic. W. John Bartram likewise mentions a "pleu-
ritic fever" attended with bilious vomitings, which
was epidemic in Pennsylvania during the winters
of 1747, '48, '49, which was most probably of a similar
nature. The first writer to whom I shall refer as
having entered more fully into the subject, is Cleythoras,
who has given an admirable description of the "Bilious
Plurisy" as it prevailed in Minorca in the winter of
1744, '45 which in all important points, perfectly coincides
with the account given of the Epidemic of this country.
And

~~*. Steep the Northwest corner of a clay bank a high
tapered country where disease spreads more of an inhuman
way from.~~

And although the treatment found best adapted to the
generality of cases was not exactly similar in the two coun-
tries, yet, after what has been said of the tendency in
this disease to put on at different times, and in different sit-
uations, the inflammatory or typhus form, this circum-
stance should not affect the identity of the diseases.

The justly celebrated Huxham, in his "Observations on the
Air and Epidemic diseases" has described an epidem-
ic which prevailed during the winter of several suc-
cessive years in Plymouth, England, and the adjacent
country, which as it bears a very strong resemblance
to the disease under consideration, requires to be
more particularly noticed. In doing this it is not my
intention to enter into a full detail of the circumstances
attending this disease, nor to draw a parallel between
it, and the American Epidemic; it will be sufficient for
my purpose merely to quote the most remarkable symptoms
as he has described them. In the first volume of his
'Observations' comprising an account of the Epidemic
which has prevailed during a period of 10 years, viz.
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from the year 1728 to '38 he described a winter epidemic which frequently prevailed in a greater or less degree, the most striking symptoms of which were, severe pain in the head, back, and often in the extremities, great debility, extreme oppression at the chest, with "peripneumonic" symptoms, bilious vomitings, violent affections of the throat, &c. He likewise mentions the frequent occurrence of glandular swellings, erysipelatous inflammation, and an eruption of pustules as favourable terminations. In more violent cases Petechiae, nervous tremors, &c. came on. A very fatal "Pulmonary fever" is also described by him as prevailing in 1740, in which, in addition to the symptoms above enumerated "There came on a terrible phrensy, and very often a kind of ulcerous angina even from the beginning, which by degrees invaded the whole fauces." This was likewise attended with "yellowness of the skin jaundiced countenance" and other bilious symptoms. Similar Epidemics prevailed likewise in several of the subsequent winters. In these epidemics the pulse was generally frequent, softer than ^{rather} natural

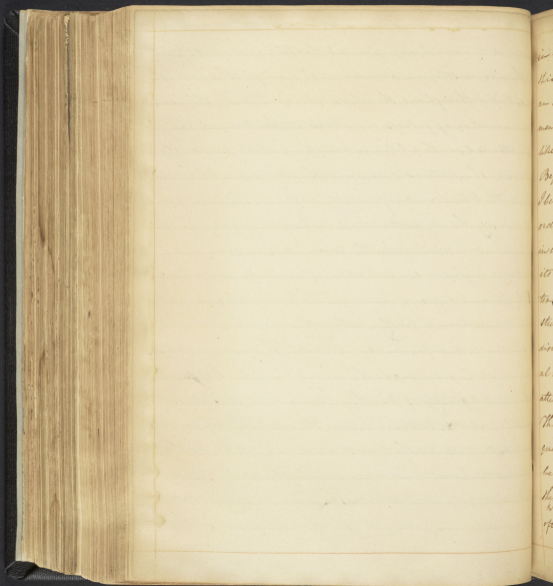
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and often irregular. Coma and eddness of the extremities not
infrequently occurred. These circumstances, are sufficient in
my estimation to prove that these are diseases of the
same nature.

The next writer whom I
shall notice is Stoll of Vienna, who in his "*Medicines
Pratique*" has treated at considerable length of a disease
which he calls "*Plurisie ou Pneumonie Bilieuse*,"
which at different periods, but particularly, in the year
1776 prevailed as an Epidemic in Vienna and other
parts of Germany. His observations, on this subject ap-
pear so judicious, and his character stands so high
as a physician and an Author that his practice
in the disease and the facts recorded by him appear
to merit our attention. I shall, therefore, as concisely as
is practicable, enumerate the most prominent symp-
toms of the Bilious Plurisy described by him, in order that
the analogy it bears to our Epidemic, may be made
apparent. The chill with which the patient was seized,
however, was more widely marked than in true infla-
mation of the lungs, and he complained of a considerable
green of

*. De toutes ces symptômes, celui dont les malades se plaignoient
davantage; c'étoit la chaleur dans la poitrine avec oppression
difficulté de respirer. Quelque uns même ne se plaignoient
que d'une gêne dans la respiration et d'une violente oppres-
sion de poitrine. These were frequently the only symptoms
complained of in the Epidemic here.

of internal heat, with oppression at the chest, and acute pain
in the side, or sternum attended with a cough; this pain of-
ten extending throughout the whole thorax. Pain in the heart,
pain, sensation of fulness, or sickness at the stomach very
often attended, with a bilious vomiting, which frequently
relieved the patients; pains in the abdomen, back and
loins. The bowels were generally costive. The pulse was
not generally hard, and varied in frequency very much
in different individuals. The fever had in some cases
regular or irregular exacerbations, though often it continued
with the same degree of violence. The expectoration was
viscid, tenacious, or frothy, intimately mixed, not tinged,
with blood, but frequently natural. The most urgent symp-
tom which he describes is the sensation of heat, oppres-
sion, and difficulty of breathing. Some even complained
of nothing else*. In some, he says, there were a very pungent
and acute pain in the breast, hard and full pulse, the
expectoration small and mixed with streaks of blood.
"Caus. la, outre la maladie bilieuse, avoient une véritable
inflammation des pommous." The affection of the throat ⁱⁿ



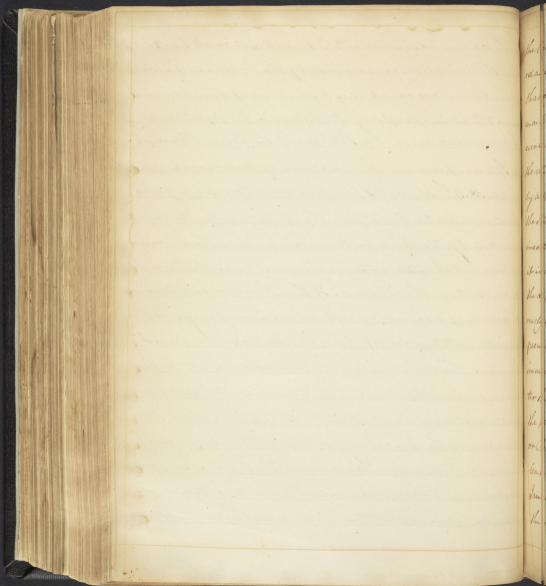
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in many cases an urgent symptom. The consequences of this disease, were also similar to those of our epidemics an Intermittent, most commonly of the Tertian form as is mentioned as frequently supervening, and the disease like our own often terminated in Typhus.

Before proceeding to consider the treatment which will I believe be found to prove most successful in this disorder, I will make a few remarks, and offer a few facts in corroboration of the opinion that the disease owes its origin to a collection of bilious, or other acrid matters, in the stomach and bowels. That some of the most striking features of this disease, viz. the foul tongue, gastric disorder, affection of the bowels, headache, sense of internal heat, may, with greater propriety than to any other, be attributed to this cause, no man presume will deny. That the affections of the chest and throat may with equal propriety be ascribed to the same cause, may be inferred from the following circumstances. 1st Any thing which greatly deranges the stomach and intestines, often occasions a pain in some part of the side accompa-
nied

* "I have, says he, several times seen Pneumonia evidently in-
duced by this affection of the liver, and in one of my patients
who died of scirrhus, liver, the lungs throughout their whole
extent adhered to the sides of the chest."

with more or less dyspnoea. 2^d It is allowed on all hands,
that the irritation occasioned by the presence of worms
in the alimentary canal is often a cause of true pneumonia. 3^d It is asserted by Dr. Wilson in his treatise on
Fetile diseases, that a Schirus of the Liver, Pancreas,
or Spleen, prove sometimes a cause of pneumonic infla-
mation. 4th It appears from the observations of many au-
thors, and particularly from the efficacy of the treatment
adopted by Cleyhorn in this disease, that the disorder
of the chest is often a true inflammation of the Pleura,
or contents of the Thorax. If then these causes often prove
a source of pneumonic inflammation, why may not the
equally irritating one of bilious matter. As it appears
therefore that the inflammation of the breast may
arise from abdominal irritation, does it require a
great exertion of our credulity, to believe, that the
affection of the Throat, so frequently occurring, may
proceed from a similar cause. The Cyanosis is
so severe, as to occasion the sudden suffocation, and
other distressing symptoms that are met with in the dis-
ease,



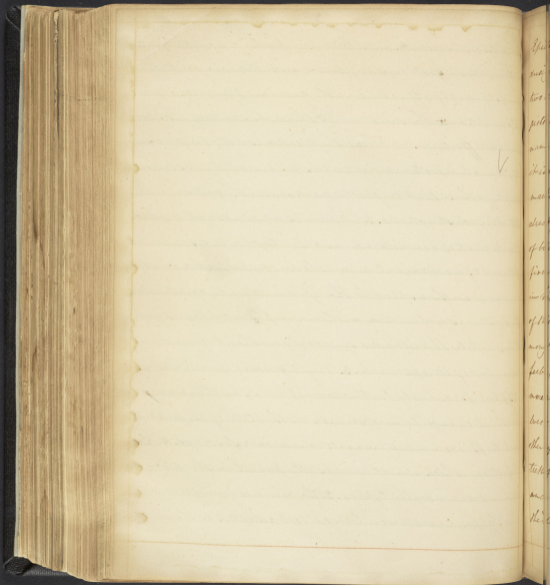
the lining membrane ^{of the throat} ~~the lining membrane~~ may be considered as continuous with that of the bronchiae, and we know that affections of the throat generally, are attended with marks of pulmonary irritations. For my own part I receive nothing that militates against this opinion, and the relief afforded to this as well as all the other symptoms by a spontaneous vomiting, or by remedies so directed to the stomach as to procure an evacuation of its contents, incontestably proves the correctness of the affections. That it is a bilious disease may likewise be inferred, from the appearance of the fluid discharged, either spontaneously or by the aid of medicines, which is generally a green, yellow or dark coloured bilious matter; from the improvement in the state of the patient after this evacuation, from the bad effects of its retention in the primæ viæ, and from the circumstance of an Inter or Remittent Fever so frequently remaining after the violence of the disease had subsided. From all these facts I am induced to believe, that the pulmonary affection is at the commencement of the disease merely symptomatic of ^{the}

*. The frequent changes in the situation of the pain, and its increase on pressure, may also be alluded to in proof of this.

†. In the only patient whose thorax, I had an opportunity of examining after death, the pericardium showed evident marks of inflammation, and contained about $\frac{1}{2}$ of a reddish serum: the heart itself was covered with an inflammatory crust, and when this was removed its surface presented the appearance of a half-boiled tripe. The portion of the left lung, immediately over the pericardium, only was inflamed.

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the gastric disorder*, and that from the longer continuance
of this latter affection, the pleura and thoracic contents
are frequently attacked with genuine pneumoniae in-
flammation† the same may, I think, be said of the an-
ginoſe affection. That the disease is not of a genuine
typhus character may be easily proved by observing
among others that might be mentioned, the following
striking distinctions. 1. Typhus is by almost all morala-
gical writers considered as a Contagious disease, but
I know of no medical man who has expressed a similar
opinion with respect to the Epidemic under consideration.
2. Typhus is ushered in with many premonitory symp-
toms, while this invades suddenly without giving any
warning of its approach. 3. This affeſsion is durational.
Typhus frequently lasting several weeks without any
material change being observable in the state of the patient
while this commonly runs its course in a few days. 4. Local
affections which almost universally prevail in this disease
are not common in typhus. 5. The remedies found useful
in Typhus, are not those which are best adapted to the cure
of this.



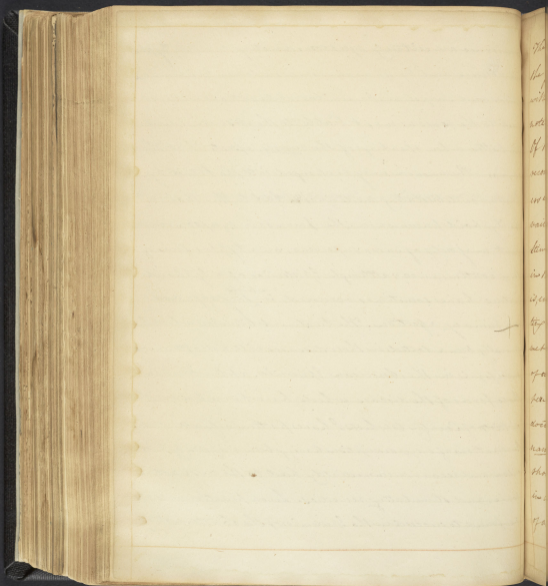
Epidemic. These are of themselves sufficient without adding other proofs, to evince the distinct nature of the two diseases.

With the disease termed by the nosologists "Pneumonia Typhodes" or Putrid Pneumonia, the name by which the Epidemic is generally designated, it is more apt to be confounded; but the following marks of distinction in addition to the circumstances already stated, as inducing me to class it among diseases of bilious origin, will in a great measure tend to confirm the correctness of the opinion. Sturgeson who has in his treatise on Pneumonia given a short account of this disease which he calls a "malignant peripneumony" asserts, that it most commonly occurred amongst feeble, debilitated and otherwise diseased subjects, and more especially the sailors who after "long cruises, and west India voyages" had become scrobutic. With other symptoms of this disease he includes "a black tongue, teeth furred with a dark, thick sordes, offensive breath and high coloured or black rank urine", these with the "bloody Dysentery" which he mentions as of such frequent

* A fact certainly never observed with respect to our fin
denie.

occurrence are certainly symptoms denoting a highly typhoid disease and by no means common to our Epidemics. Wilson and Cappel make similar observations with regard to the persons most liable to the disease; and the latter when speaking of the croup, asserts that the common Pneumonia may be changed into the Pleurisy by heating or debilitating medicines. I add to this that in the Typhoid pneumonia the Pneumonic symptoms in a great majority of cases supervene on a typhoid fever of long continuance; although Epidemics of a typhoid nature have sometimes occurred, in ^{which} they appeared as a primary affection. The treatment likewise which has generally been adopted in those diseases will not often prove successful in the American Epidemics, at least not in those forms of the disease which have prevailed in the districts of Country to which I have particularly alluded. Evacuations of every description having been uniformly prohibited and resorted to immediately had to the most active tonics and stimulating remedies. Such practice will not be found to succeed in the Epidemics of the Southern States.

The

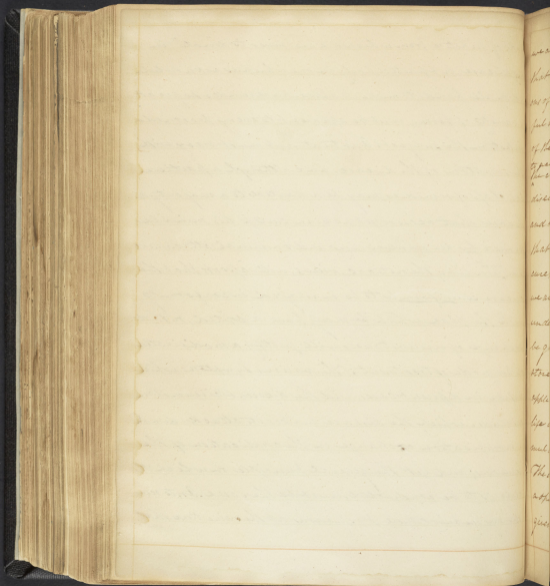


The presence of Bilious symptoms, prostration of strength, the general softness of the pulse, affection of the head, with many other attending circumstances, sufficiently denote that it is not genuine pneumonia.

Of the Treatments. Various modes of treatment have been recommended and adopted in this disease by the practitioners in the different sections of Country in which it has prevailed. These however may be reduced to three viz. 1. The stimulating plan which has almost universally obtained in the North, and in many parts of the South, and which is, indeed, the one most generally resorted to. 2. The evacuating plan, and 3. That by leuciasia, which has hitherto met with the fewest advocates. To neither of these methods of cure are we exclusively to trust, though each is at some period of the disease to be practiced. If, Professor Rush's doctrine of prescribing for the symptoms, and not the name of a disease, be ever adopted in practice, it should be in the present instance, where the disease in different situations assumes such an immense variety of aspects. The absurdity of prescribing an invariable mode.

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mode of practice from which we are "never to deviate", in
any disease, but particularly in one which is acknowl-
edged on all hands to make its appearance under so great
a variety of forms, must be apparent to every person who
reflects on the subject. Our treatment must vary with
the symptoms of the disease, and although a particu-
lar class of remedies may be adapted to a majority of
the cases that occurs, yet no man unless his mind be
warped by an overbearing and criminal attachment
to his ^{own} peculiar theoretical views, will assert, that the
disease is uniformly to be managed in conformity
with the plan which he may have adopted, or that
no change of circumstances, will justify a modification
of his mode of treatment. The various symptoms which
appear in different cases, and the different circumstan-
ces under which the disease makes its attack, demand
a modification or change in the application of the
remedies; and yet the general principles on which the
cure is to be conducted, must be the same. Or, to ren-
der my meaning more perspicuous, at the same time that
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we are particularly attentive to the more urgent symptoms that occur, varying our treatment to meet the indications of cure in each individual case, we should be careful not to lose sight of the primary affection. The cause of the disease must be removed before we can expect to accomplish the cure of our patient. Conceiving, as I do, that the disease is occasioned by an accumulation of bilious and other matter in the alimentary canal, the first step that I would recommend towards accomplishing a cure, is the exhibition of an active Emetic. This, when we are called at the commencement of the disease, ~~proceeds~~ under circumstances, hereafter to be pointed out, should be given as soon as some degree of warmth has been restored to the surface, by the use of warm drinks, warm applications, &c. and in some cases, where the powers of life appear extremely languid, by the exhibition of stimulants, or if possible before the chill be perfectly formed. The article which appears best calculated to procure a speedy and effective operation is the Emetic Tactus, given in divided doses at short intervals, or the Powd. Ipecacuanha,

* It was frequently found useful to combine the emetic
with Calomel.

† Huxham and Stoll principally trusted to the use of Emetics
and Cathartics in the cure of the Epidemic described by them.

Spica when rendered more active by the addition of
a small portion of Emetic Tartar. When given thus early,
I have known the most decided advantages, especially to result
from the use of these medicines, the violent symptoms of the
disease immediately giving way on the free evacuation of
the stomach, and the rapid recovery of the patient being
effected with very little subsequent treatment. After however
we will be disappointed in our expectations of the speed-
ily good effects of the first emetic, and a second or even a
third becomes necessary. It is proper in this place to observe
that as the irritability of the stomach is often much dimin-
ished, particularly if the patient have laboured under
the disease for one or more days, the frequent repetition of
the medicine is not only demanded, but it is also
 requisite that the dose be larger, than in the ordinary
cases in which it is indicated. The discharges, as I have
before observed, whether occurring spontaneously or
by the use of emetics are evidently bilious; this circumstance
added to the relief they almost invariably afford, is suf-
ficient proof of the propriety of the practice. The

*. This "many-headed monster" has again reared its horrid
front in Maryland; and as I am informed by a friend whose
talent and acquirements render his observations on this matter
as every other subject connected with Medical Science, worthy
of attention, has appeared under nearly the same form that
it assumed in preceding years: being principally character-
ized by a disordered state of the chylotropic organs, attended
in most cases with a pneumonic affection. Dr. John Givins, the
gentleman to whom I have alluded, has practiced very extensively
and with considerable success in the disease during the present
winter, and the details which he has given correspond very
nearly with the description I have offered, and the method of
cure pursued by him is similar. "I am certain," says he, "that
by removing the gastric disorder and restoring the abdominal
viscera to their proper functions, we cure the disease with
more promptitude and certainty, than we could have done by
any other method;" and in a subsequent letter, he says, "my ex-
perience amounts to this, keep the bowels open, and your patient
will recover; permit them to be constipated, and he will die."

The next class of remedies, to which ^{we} are to have recourse, is Cathartics. These are in all cases at some period of the disease or others, indispensable. They should be given, very soon after the patient has recovered from the operation of the Stimulants, with a view to their full operation; and throughout the remainder of the disease whenever they become necessary, not only to obviate costiveness, but to keep the bowels gently laxative. The absolute necessity of keeping up this state of the bowels, I have repeatedly seen evinced by the bad effects arising from the neglect of, and the evident advantages resulting from, a strict attention to the practice. If, from the symptoms of prostration which so frequently predominate, we be deterred from the employment of Cathartics, their effect should be produced by the frequent administration of Emulata. The article which I have seen most advantageously employed, is the Colomel, in doses of two, three, or four grains given at intervals. As a laxative the Pulv. Rhaz. or Fol. Sennae will probably be found most agreeable to the patient.

After the free evacuation of the stomach and bowels

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Diaphoretics are generally indicated, particularly during the exacerbation, of the febrile symptoms. They should be given with a view of keeping up a moderate and general diaphoresis for 12 or 24 hours, and to accomplish this purpose, the preparations of antimony appear best calculated. Those preparations which I have seen employed with the best effect, are the Pulvis Antimonii Pol., the Pulvis Jacobi, and a solution of Emetic tartar in small doses repeated at intervals of 3 or 4 hours. The Antimonial powder with Nitre and Calomel was likewise frequently employed, and with great advantage to the patient. The Dover's powder, proved also a very useful medicine; particularly if Rheumatic pains of the joints or muscles attended: In the exhibition of this however a more particular attention to ^{the} bowels became requisite.

This plan of treatment appeared to be adapted to every form of the disease, except in those cases of a moribund character in which the strength is from the commencement greatly prostrated, and the patient appears utterly incapable of bearing evacuations of any descriptions.

*. The stimulating application of Dr. Hartshorne composed of equal parts of oil of Turpentine and powdered Cantharides, has been recommended by Dr. Chapman.

That this stimulating plan was often necessary in many situations, at the commencement of the disease is sufficiently proved by the testimony of Professor Chapman, and many other practitioners. Dr. Rush likewise, speaks of a bilious pleurisy sometimes prevailing here, which required the use of bark and Opium.

*. The lancet was very generally employed in many parts of Maryland, and by Dr. Trent and others of Virginia with much advantage. It was likewise the remedy chiefly employed by Elephora; and is said by Dr. Rush to have been successfully used in the disease when it prevailed in Philadelphia in 1794 '95.

Under such circumstances, the reaction of the system must be excited as speedily as possible by the use of active stimulating remedies. For the accomplishment of this purpose wine, brandy, volatile alkali, and Camphor must be freely exhibited, at the same time that we apply heat externally: blisters, and singeries likewise become necessary*. The cases requiring this free use of stimulents ^{were} however not frequent, and as soon as the system reacts, and the patient is relieved from the immediate danger of his situation, the treatment above recommended must be adapted, at least so much of it as regards the free use of Cathartics and Diaphoretics. These particularly the former are in no case to be dispensed with.

Bloodletting, though sometimes called for, was not very frequently indicated, except in mountainous countries in which the disease assumed a much more inflammatory form, and where bleeding was freely employed with great advantage*. The cases requiring this mode of depletion, were those which put on the form of Rheumatic, or inflammation of the throat attended with a full tense pulse, which
though

I have seen the lancet very successfully employed, by the pres-
tor Dr. Rigby of Annapolis, the gentleman alluded to in a sub-
sequent part of this Essay, in many cases of this description,
it was however always used by him with caution.

rare sometimes occurred. It was however, even in these cases,
necessary to use the lancet cautiously, and never repeat the
evacuation after the pulse had been reduced. In these cases,
a decoction of the *Pygalastegia*, taken frequently, proved
highly useful as an expectorant and diaphoretic. A
decoction of the *Asclepias Decumbens* or *Pleurisy* root
was much employed with this intention by many practi-
tioners. With respect to the local treatment, it will
be sufficient to mention in general terms, that whenever
much topical affection existed, Blisters were almost in-
variably resorted to. Generally speaking, the affections
of the head, throat, or chest yielded to no other applications
though in some instances, I have known the use of hot fomen-
tations, or heated substances, externally applied, afford
speedy relief. In severe cases the blisters should be large and
repeatedly applied. Topical bleedings, and dysenteries, I
have seen sometimes useful. None of these remedies however
are to be considered as any thing more than auxiliaries.

When the disease terminates in Typhus, we must
employ the remedies adapted to that state of Fever. (Bark
Stopper)

* One case terminating in Intermittent, after resisting large quantities of Bark, Arsenic, &c, yielded to the use of the Eupatorium Reflexum.

Serpentaria, Camphor, and more particularly, wine, and volatile alkali, are the articles, to be relied on. As a mild cooling diaphoretic, the Spiritus Mindereri is a medicine of considerable efficacy. Bark and the other vegetable Tonics, are required in the subsequent state of debility, in which the patient is generally left to complete the cure. The Intermittent which frequently succeeds, is to be treated in the usual manner*. Most of the consequences mentioned as succeeding to this disease, may in great measure be obviated, by the adoption of the plan of treatment here recommended.

In all cases of Metastasis, which has been ^{said} to frequently to occur, we are to keep in view the cause of the disease, and at the same time apply remedies adapted to the local affection.

This disease has in its progress observed that law, of all preceding epidemics, particularly remarked by Sydenham, by which all concurrent diseases, are made to assume the character of the prevailing one. Or as Dr. Rush has elegantly expressed it, "are forced to do homage to the monarchy of the single disease, by wearing its livery". Rheumatism, Synocha,

* This was particularly accomplished in my own person.
I was attacked with severe rheumatick pains in my head,
shoulders, muscles of the thorax, &c, with a foul tongue,
thirst and other febrile symptoms, all of which soon
yielded to the operation of an active emetic, followed
by a cathartic.

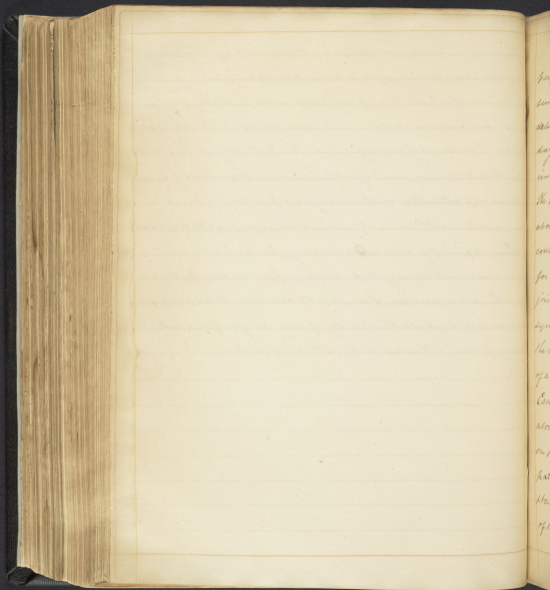
Cynanche, Catarrh, Pneumonias, in that all the diseases of the winter and spring assumed more or less of its characteristic form, and hence required a modification in their mode of treatment adapted to the change in their appearance, and grounded on the peculiar nature of the reigning disease*.

The above, after reflecting on every thing which I have seen or heard relating to this Epidemic appears to me to constitute the "Modus medendi" which will be found most uniformly successful in the treatment of the disease. I am aware that in recommending its adoption, I may incur the charge of presumption in thus opposing the high and respectable authorities, who have advocated a contrary mode of practice. It may appear still more presumptuous, to support this opinion having heard an opposite doctrine so recently expounded by an eloquent Professor in this University; but, a sincere conviction of the correctness of the views which I have fully endeavoured to support, and of the efficacy of the treatment, would allow me to pursue no other course; "Amicus Plato, sed Amica magis Veritas!"
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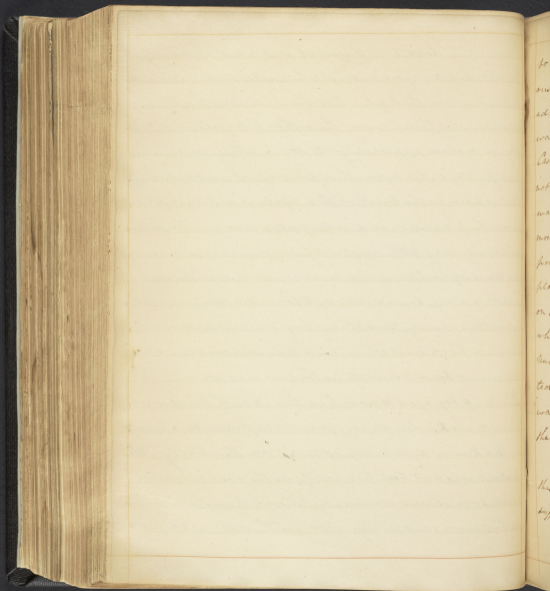
These remarks are not offered as the result of my own
practice or experience, but as arising from observations
made on the practice of an able and judicious physi-
cian, whose success in the treatment of this scourge
of our land, at least equalled that of any of his bro-
ther practitioners; and of other eminent medical men,
whose opportunities of observing its progress were com-
mensurate with their zeal in endeavouring to arrest it.

Some apology appears necessary for the imperfect
manner in which my task has been performed, but on a
further consideration I am led to consider it as superflu-
ous, and to trust to the lenity of my Judges for making
every proper allowance for its imperfection.



Case 1. M. T. aged 48 went to bed apparently in perfect health; about midnight he awoke with a chill and severe pain in the head, which soon increased to a violent delirium. This lasted during the night, but yielded the next day to a state approaching to stupor, which continued in a greater or less degree, throughout a great part of his illness. He had pain in the breast, with a tightness and oppression about the præcordia, and some gastric disorder. The disease continued, very little affected by the remedies employed, for ten days, when his arm became inflamed at the elbow joint to a very considerable extent, and a remission of the symptoms speedily took place; he gradually recovered by the use of bark and colombo. I have seen one other case of a violent kind terminate in the same manner.

Case 2. A boy aged 18 years had been ill with the disease about a week, when an erysipelatous inflammation appeared on the knee and gradually extended over the whole leg. The patient, who had been previously in the most alarming state, soon became considerably relieved from the violence of the disease, and finally recovered. The inflammation yielded.



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to the use of blisters. — One case terminated in phlegmonous inflammation of the knee joint, and the patient recovered, though a considerable time elapsed, before the cure was completed.

Case 3. This was an interesting case of the disease which did not terminate so favourably as the preceding. The patient was attacked in the usual manner with headache, pneumonia, and gastric disorder. After the use of b.l. and a powder ^{composed} of antimony, nitre, and Calomel had been employed, a translation of the disease to the knee took place on the third day, and the patient ^{2 days} laboured under what his master considered an alarming diarrhoea. Under these circumstances the Dover's powder was exhibited. The medicines had no action on the skin, the diarrhoea was stopped, a complete translation of the disease from the knee to the brain took place, and he died in 24 hours.

Number of other cases might be related in proof of this character of the disease but the above are deemed sufficient.

